

REMARKS

Applicant has amended claims 1, 3-5, 7, 9, and 13 herein. New claims 16 and 17 are added herein and do not disclose any new matter. Claims 11, 12, 14, and 15 are withdrawn. The specification has been amended to correct mistyped reference numbers.

I. STATEMENT ESTABLISHING ASSIGNMENT UNDER 37 C.F.R. § 3.73(b)

On December 20, 2000, the inventors assigned 100 percent of their interest in the present patent application to the assignee, Boston Whaler, Inc. The assignment was recorded at the United States Patent and Trademark Office on January 10, 2001, on Reel/Frame 011453/0345. The assignment was filed in connection with the patent application that issued as U.S. Patent No. 6,726,865, of which the present application is a continuation. The undersigned is authorized to act on behalf of the assignee.

II. RESTRICTION REQUIREMENT

The Examiner has required restriction to one of the following inventions pursuant to 35 U.S.C. § 121:

I. Claims 1-10 and 13, drawn to a method for manufacturing vehicle hulls, classified in class 264, subclass 46.5.

II. Claims 11, 12, 14, and 15, drawn to a vehicle hull, classified in class 114, subclass 357.

The Examiner's position is that the inventions are patentably distinct from each other for the reasons given in the Examiner's detailed action.

As discussed during a telephone conversation between the Examiner and Applicant's counsel, Applicant hereby elects the invention in Group I, Claims 1-10 and 13, without traverse.

Group II, Claims 11, 12, 14, and 15, are not elected by the Applicant and are withdrawn herein.

III. TERMINAL DISCLAIMER TO OBLIGATE A DOUBLE PATENTING REJECTION UNDER 37 C.F.R. § 1.321(c)

Applicant is filing a terminal disclaimer separately and concurrently herewith to obviate the Examiner's rejection of claims 1-10 on the ground of nonstatutory, obviousness-type double patenting as being unpatentable over claims 1-7 of Mielke et al., U.S. Patent No. 6,726,865, in view of Graham et al., U.S. Patent No. 3,124,626, or Hordis, U.S. Patent No. 5,372,763. Applicant respectfully requests that the Examiner withdraw the rejection and allow claims 1-10.

IV. REJECTIONS UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

Applicant respectfully traverses the Examiner's rejection of claims 1-10 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant has amended claim 1 to replace the phrase "a bottom gel coat" with "said bottom protective covering." Claim 1 is also amended to replace the phrase "a top gel coat" with "said top protective coating." New claim 16, which depends upon amended independent claim 1, is added herein to disclose that said bottom protective coating can be a gel coat and that said top protective coating can also be a gel coat. See also Applicant's specification, Detailed Description section, third paragraph. Claim 7 is amended herein to change its dependency

from independent claim 1 to dependent claim 16. The semicolon in claim 7 is replaced by a period.

With these amendments, the initial steps of independent claim 1 share a nexus between them. Thus, the language of the claims is clarified and is no longer indefinite. Applicant respectfully requests that the Examiner withdraw the rejection and allow claims 1-10.

V. REJECTIONS UNDER 35 U.S.C. § 103(a)

A. Claims 1 and 3-6

Applicant respectfully traverses the Examiner's rejection of claims 1 and 3-6 under 35 U.S.C. § 103(a), as being unpatentable over Graham et al., U.S. Patent No. 3,124,626, in view of Hegg, U.S. Patent No. 3,531,809, and Hordis, U.S. Patent No. 5,372,763. Applicant's invention differs from the Graham reference in several aspects. Applicant has amended independent claim 1 to disclose that the adhesive 308 used to close the top mold 300A and the bottom mold 300B together forms a structural connector 308A between the top mating portion 310A and the bottom mating portion 310B. This structural connector 308A, or structural bond, creates a single, unitary piece, which includes at least one cavity, from the layers (302, 304, and 306) attached to the top mold 300A, the layers (302, 304, and 306) attached to the bottom mold 300B, and said structural connector 308A formed between the top mating portion 310A and the bottom mating portion 310B. See Applicant's specification, page 14, lines 10-24, and page 15, lines 1-3. Applicant's structural adhesive is unique in that said adhesive forms the structural connector that firmly and permanently bonds the two sides of the hull together and becomes a part of the

solid, unitary, single-piece structure of said hull so as to resist the pressure created by the foam introduced into the cavity. See Applicant's specification, page 10, lines 10-15. Thus, a complete, single-piece, unitary hull is formed by use of the structural adhesive in Applicant's invention rather than a two-piece hull less securely and less permanently bonded together as in conventional vessel construction. The solid connector formed by the structural adhesive provides interior strength to the unitary hull and reduces or eliminates the need for stringers within said hull. See Applicant's specification, page 15, lines 1-3, 9-13. Conventional adhesives used in ship-building may dissolve or crack over time with exposure to physical and environmental stressors and do not solidify to form a permanent volume-filling portion of the unitary hull structure.

As stated by the Examiner on page 4 of the current Office Action, the Graham reference does not teach the application of an adhesive to top and bottom mating portions. The Hordis reference describes the use of an adhesive to connect an inner transom wall (15) to an outer transom wall (17), however, Hordis does not describe the use of a structural adhesive that forms a structural connector to form a single, unitary piece hull. See Hordis, column 4, lines 32-33, 48-50. Hordis merely describes an adhesive used to connect two transom walls together and does not suggest that the adhesive is a structural adhesive that forms a solid, permanent, unitary structural part of the hull of a vessel. Hordis also does not teach the use of an adhesive that increases the interior strength of the hull to resist the pressure of foam introduced into the cavity or one reduces or eliminates the need for stringers within the hull. Even the inner and outer transom walls of Hordis are bonded together in a sandwich structure primarily by

syntactic foam that acts as a bonding agent between said walls as the foam cures. See Hordis, column 5, lines 45-48; and column 6, lines 1-7. Like Hordis, the Hegg reference also fails to disclose any structural adhesive that forms a structural connector between the hull pieces to create a unitary, single-piece hull.

Applicant's invention further includes three layers of materials applied over the surfaces of top and bottom molds: protective coating, skin coat, and bulk fiberglass. See Applicant's specification, page 6, lines 14-17; page 7, lines 2-5; page 8, lines 9-13; and claim 1. Applicant's method requires that the protective coating be applied first. The skin coat is next applied over the protective coating, and finally, the bulk fiberglass is applied over the skin coat. These layers applied over each mold are permanently and structurally connected by the structure-forming adhesive used in Applicant's invention.

Applicant's dependent claims 3-6 depend upon the currently amended independent claim 1, and thus, incorporate by reference all of the elements and limitations of independent claim 1, including the novel adhesive application and structural connector forming steps. 35 U.S.C. § 112, fourth paragraph. For these reasons, Applicant respectfully requests that the Examiner withdraw the rejection and allow claims 1 and 3-6.

B. Claim 2

Applicant respectfully traverses the Examiner's rejection of claim 2 under 35 U.S.C. § 103(a), as being unpatentable over Graham et al., U.S. Patent No. 3,124,626, in view of Hegg, U.S. Patent No. 3,531,809, and Hordis, U.S. Patent No. 5,372,763, as applied to claims 1 and 3-6, and further in view of Stoeberl, U.S. Patent No. 3,840,926. Applicant's dependent claim 2 depends upon the currently amended independent claim 1,

and thus, incorporates by reference all of the elements and limitations of independent claim 1, including the novel adhesive application and structural connector forming steps. 35 U.S.C. § 112, fourth paragraph. For these reasons, Applicant respectfully requests that the Examiner withdraw the rejection and allow said claim.

C. Claims 7-10

Applicant respectfully traverses the Examiner's rejection of claims 7-10 under 35 U.S.C. § 103(a), as being unpatentable over Graham et al., U.S. Patent No. 3,124,626, in view of Hegg, U.S. Patent No. 3,531,809, and Hordis, U.S. Patent No. 5,372,763, as applied to claims 1 and 3-6, and further in view of Kurtz et al., U.S. Patent No. 4,568,604. Applicant's dependent claims 7-10 depend upon the currently amended independent claim 1, and thus, incorporate by reference all of the elements and limitations of independent claim 1, including the novel adhesive application and structural connector forming steps. 35 U.S.C. § 112, fourth paragraph. For these reasons, Applicant respectfully requests that the Examiner withdraw the rejection and allow claims 7-10.

D. Claim 13

Applicant respectfully traverses the Examiner's rejection of claim 13 under 35 U.S.C. § 103(a), as being unpatentable over Stoeberl, U.S. Patent No. 3,840,926. Applicant's dependent claim 13 depends upon the currently amended independent claim 1, and thus, incorporates by reference all of the elements and limitations of independent claim 1, including the novel adhesive application and structural connector forming steps. 35 U.S.C. § 112, fourth paragraph. For these reasons, Applicant respectfully requests that the Examiner withdraw the rejection and allow said claim.

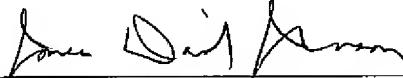
VI. SUMMARY

In view of the amendments to the claims contained herein, the application is placed in condition for allowance. Applicant respectfully requests favorable action by the Examiner to that end. Therefore, Applicant respectfully requests a Notice of Allowance.

Should the Examiner have any remaining questions or comments, the undersigned would appreciate a telephone call to possibly expedite this case.

If there are any additional charges, including extension of time, please bill our Deposit Account No. 13-1130.

Respectfully submitted,


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